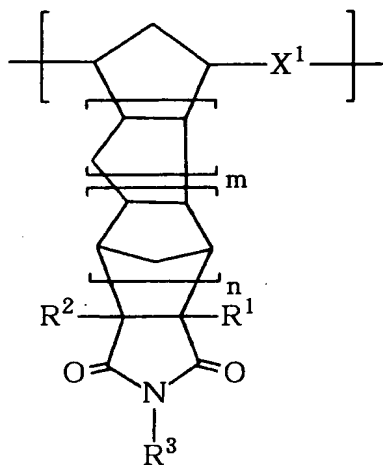


CLAIMS

1. A ring-opened polynorbornene comprising a structural unit (I) represented by the following general formula (I):

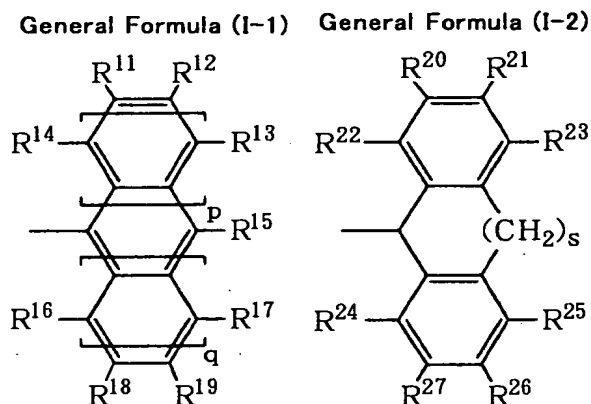
[Chemical formula 1]

General formula (I)



- wherein in the general formula (I), m and n are, independently of each other, an integer of 0 to 2, X^1 means an ethylene or vinylene group, R^1 and R^2 denote, independently of each other, a hydrogen atom or a substituted or unsubstituted hydrocarbon group having 1 to 30 carbon atoms, and R^3 represents a group represented by the following general formula (I-1) or a group represented by the following general formula (I-2):

[Chemical formula 2]

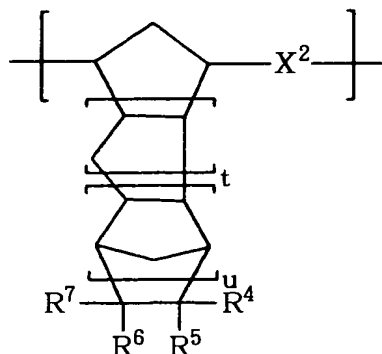


wherein in the general formulae (I-1) and (I-2), R¹¹ to R²⁷
 5 denote, independently of one another, a hydrogen atom; a
 halogen atom; a substituted or unsubstituted hydrocarbon
 group having 1 to 30 carbon atoms, which may have a linkage
 containing or not containing oxygen, sulfur, nitrogen
 and/or silicon atom(s); or a polar group, p and q in the
 10 general formula (I-1) are individually 0 or a positive
 integer, with the proviso that when both p and q are 0, R¹²
 and R¹⁵, or R¹⁹ and R¹⁵ may be bonded to each other to form a
 carbon ring or heterocyclic ring, and the carbon ring or
 heterocyclic ring may be either a monocyclic structure or a
 15 polycyclic structure, and s in the general formula (I-2) is
 0 or an integer of 1 or greater.

2. The ring-opened polynorbornene according to claim
 1, which comprises a structural unit (II) represented by
 the following general formula (II).

[Chemical formula 3]

General Formula (II)



wherein in the general formula (II), t and u are,
independently of each other, 0 or a positive integer, X^2
5 means an ethylene or vinylene group, R^4 to R^7 denote,
independently of one another, a hydrogen atom; a halogen
atom; a substituted or unsubstituted hydrocarbon group
having 1 to 30 carbon atoms, which may have a linkage
containing or not containing oxygen, sulfur, nitrogen
10 and/or silicon atom(s); or a polar group, with the proviso
that R^4 and R^5 , or R^6 and R^7 may be united with each other
to form a divalent hydrocarbon group, R^4 or R^5 , and R^6 or R^7
may be bonded to each other to form a carbon ring or
heterocyclic ring, and the carbon ring or heterocyclic ring
15 may be either a monocyclic structure or a polycyclic
structure.

3. The ring-opened polynorbornene according to claim
2, wherein the proportion of the structural unit (II) is at
most 98 mol% based on the whole structural unit.

20 4. The ring-opened polynorbornene according to any
one of claims 1 to 3, wherein at least 90 mol% of X^1 in the

general formula (I) and X^2 in the general formula (II) are ethylene groups.

5. The ring-opened polynorbornene according to any one of claims 1 to 4, which has the structural unit (I), in which in the general formula (I), m is 0, and n is 1.

6. The ring-opened polynorbornene according to any one of claims 1 to 5, which has the structural unit (I), in which in the general formula (I-1), p is 0, q is 0, and at least one of R^{11} and R^{18} is another substituent group than hydrogen.

7. The ring-opened polynorbornene according to any one of claims 1 to 5, which has the structural unit (I), in which in the general formula (I-1), p is 0, q is 0, at least one of R^{11} and R^{18} has another substituent group than hydrogen, and at least one of R^{12} , R^{15} and R^{19} is another substituent group than hydrogen.

8. The ring-opened polynorbornene according to any one of claims 1 to 5, which has the structural unit (I), in which in the general formula (I-1), p is 0, q is 0, and both R^{11} and R^{18} are other substituent groups than hydrogen.